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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,650	12/20/2001	Anton C. Rothwell	NA11P056/01.187.01	2721
28875	7590	04/09/2007	EXAMINER	
Zilka-Kotab, PC			CHEA, PHILIP J	
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SAN JOSE, CA 95172-1120			PAPER NUMBER	
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SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/028,650	Applicant(s) ROTHWELL ET AL.	
	Examiner Philip J. Chea	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31, 33-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/6/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to an Amendment filed February 2, 2007. Claims 1-31,33-41 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 35-36, since claim 1 has the network adapter capable of being installed on the end-point computer, it is unclear how the PCI or ISA will be installed since they are required to be in (i.e. inside attached to the motherboard) the end-user computer.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4,6-8,10-21,23-31,34,38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al. (US 6,075,863), and further in view of Chi (6,006,329).

As per claim 1, Krishnan discloses a network adapter system, comprising:

a processor positioned on a network adapter coupled between an end-point computer and a network (see column 2, lines 33-39, where network adapter is considered the software-controlled modem), the network adapter capable of being installed on the end-point computer (see column 2, lines 44-50);

Art Unit: 2153

wherein the processor is adapted for virus scanning and content scanning of network traffic transmitted between the end-point computer and the network, the content scanning including scanning for unwanted content other than viruses (see column 5, lines 16-28, where processor executes applets to scan incoming data and content is considered "junk e-mail");

Although the system disclosed by Krishnan shows substantial features of the claimed invention (discussed above), it fails to disclose that the virus scanning utilizes virus signature files and that the virus signature files are stored on non-volatile solid state memory on the network adapter.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Krishnan, as evidenced by Chi.

In an analogous art, Chi discloses scanning data streams for viruses (see Abstract) using virus signature files to detect known viruses (see column 3, lines 47-65).

Given the teaching of Chi, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Krishnan by employing virus signatures, such as disclosed by Chi, in order to detect the viruses without having to store the entire virus code.

In considering the virus signature files being stored on non-volatile solid state memory on the network adapter, Krishnan shows storing virus detection applets and program code implementing a virtual machine for execution of programs in ROM and battery backed RAM for long term storage (see column 2, line 65 – column 3, line 12). Therefore it would be obvious to also store the virus signature files with the applets and program code in order for the applets executing the virus scan to use the signatures to detect viruses.

As per claim 2, Krishnan in view of Chi further disclose that the processor is capable of being user-configured (see Krishnan column 5, lines 33-35).

As per claim 3, Krishnan in view of Chi further disclose that the processor is capable of being user-configured locally (see Krishnan column 3, lines 24-26)

As per claim 4, Krishnan in view of Chi further disclose that the processor is capable of being user-configured remotely via a network connection with the network adapter (see Krishnan column 3, lines 36-37).

Art Unit: 2153

As per claim 6, Krishnan in view of Chi further disclose that the manner in which the scanning is performed is capable of being user-configured (see Krishnan column 5, lines 16-32).

As per claim 7, Krishnan in view of Chi further disclose that the settings of the network adapter are capable of being user-configured (see Krishnan column 5, lines 33-35).

As per claim 8, Krishnan in view of Chi further disclose that the processor is capable of determining whether received packets are of interest (see Krishnan column 5, lines 16-23, where packets of interest are considered viruses, etc.).

As per claim 10, Krishnan in view of Chi further disclose that the processor is capable of passing received packets that are not of interest to the computer (see Krishnan column 5, lines 16-23, i.e. if not a virus than packets is not discarded).

As per claim 11, Krishnan in view of Chi further disclose that the processor is capable of scanning received packets that are of interest (see Krishnan column 5, lines 16-23, i.e. scanning packets for viruses).

As per claim 12, Krishnan in view of Chi further disclose that the processor is capable of denying received packets that fail the scan (see Krishnan column 5, lines 16-23).

As per claim 13, Krishnan in view of Chi further disclose that the scan is performed based on user settings (see Krishnan column 3, lines 2-6).

As per claims 14,27,28, Krishnan in view of Chi discloses a method for scanning network traffic on a network adapter, comprising:

receiving packets at a network adapter including a processor positioned thereon, the network adapter being capable of being installed on an end-point computer (see Krishnan column 2, lines 33-39, where network adapter is considered the software-controlled modem);

virus scanning and content scanning of the packets utilizing the processor, the content scanning including scanning for unwanted content other than viruses (see Krishnan column 5, lines 16-28, where processor executes applets to scan incoming data and content is considered "junk e-mail"); and

conditionally taking security measures if the packets fail the scan (see Krishnan column 5, lines 16-23);

Art Unit: 2153

wherein the virus scanning utilizes virus signature files to scan for known types of malicious programs or data (see Chi column 3, lines 47-65);

wherein the virus signature files are stored on non-volatile solid state memory on the network adapter (please see discussion above regarding solid state memory, i.e. program files are stored in ROM, therefore it would be obvious to store the signature files there as well).

As per claims 15-23,24-26, see rejection for claims 2-8,10-13 above.

As per claim 29, Krishnan in view of Chi disclose a network adapter system, comprising:

a processor positioned on a network adapter coupled between a computer and a network, the processor including a packet assembly module, random access memory (RAM), and a scanner module (see column 2, lines 56-65, where it is implied if not inherent that there is a packet assembly module in order to receive data from the outside see column 5, lines 16-18 for scanner module);

a user interface driver for identifying network traffic of interest transmitted between the computer and the network (see Krishnan column 5, lines 24-31);

wherein the processor is adapted for discerning and virus scanning and content scanning of network traffic of interest transmitted between the computer and the network (see Krishnan column 5, lines 16-31);

wherein the virus scanning utilizes virus signature files to scan for known types of malicious programs or data (see Chi column 3, lines 47-65);

wherein the virus signature files are stored on non-volatile solid state memory on the network adapter (please see discussion above regarding solid state memory, i.e. program files are stored in ROM, therefore it would be obvious to store the signature files there as well).

As per claim 30, Krishnan in view of Chi further disclose that the content scanning enforces operational policies of an organization (see Krishnan column 5, lines 24-30).

As per claims 31,40, Krishnan in view of Chi further disclose that the policies include detecting entities selected from the group consisting of harassing content, pornographic content, junk e-mails, and misinformation (see Krishnan column 5, lines 24-30).

Art Unit: 2153

As per claim 34, Krishnan in view of Chi further disclose that the packets that are of interest include executable files (see Krishnan column 5, lines 16-23).

As per claim 38, Krishnan in view of Chi further disclose that the network adapter includes a cable modem adapter (see column 6, lines 36-45).

As per claim 39, Krishnan in view of Chi further disclose that the network adapter includes a broadband adapter (i.e. cable modem).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Chi as applied to claims 8,21 above, and further in view of Makinson et al. (US 7,023,861), herein referred to as Makinson.

As per claims 9,22, although the system disclosed by Krishnan in view of Chi shows substantial features of the claimed invention (discussed above), it fails to disclose that the packets of interest are based on an associated protocol.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Krishnan in view of Chi, as evidenced by Makinson.

In an analogous art, Makinson discloses a bridge with a built in scanner connected to an end-user computer (see Fig. 5), where the scanning of packets may be selected based on the certain types of protocols (see column 4, lines 50-57).

Given the teaching of Makinson, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Krishnan in view of Chi by employing protocol

Art Unit: 2153

specific scanning, such as disclosed by Makinson, in order to relieve the processor from scanning unnecessary packets.

7. Claims 5,18,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Chi as applied to claims 3,17,32 above, and further in view of Bonomo et al. (US 6,658,562), herein referred to as Bonomo.

Although the system disclosed by Krishnan in view of Chi shows substantial features of the claimed invention (discussed above), it fails to disclose that memory is user protected by configuring a network adapter BIOS with a password that only a user can change.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Krishnan in view of Chi, as evidenced by Bonomo.

In an analogous art, Bonomo discloses a system for setting different BIOS configurations stored in a memory device (see Abstract). Further showing setting a password to view information in a BIOS setup program or to change configuration (see column 4, lines 11-21 and 30-41).

Given the teaching of Bonomo, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Krishnan in view of Chi by employing a password protected BIOS, such as disclosed by Bonomo, in order to prevent unwanted users from changing settings without authorization.

8. Claims 35-36,41, are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Chi.

As per claim 35,36, Krishnan in view of Chi does not expressly disclose that the network adapter includes a Peripheral Component Interconnect (PCI) card and/or an Industry Standard Architecture (ISA) card. However, Krishnan does disclose that the adapter can be an add-in card for installation in an expansion slot of a computer comprising an expansion bus interface (see column 2, lines 47-50). At the time of the invention, a person having ordinary skill in the art would have recognized that PCI and ISA are commonly used and well known expansion bus interfaces. Therefore it would have been obvious to

Art Unit: 2153

make network adapters for both PCI and ISA in order to provide an adapter compatible with most computers.

As per claim 41, Krishnan in view of Chi discloses that the unwanted content includes junk e-mails (see column 5, lines 24-29), but does not expressly disclose that the unwanted content includes harassing content, pornographic content, and misinformation. However, considering that Krishnan teaches applets may be used to configure a modem to scan viruses for potentially hazardous programs, or search e-mail headers with particular subject lines, a person having ordinary skill in the art at the time of the invention would have found it obvious to discard data that may contain harassing content, pornographic content and misinformation in order to keep the incoming data safe for users.

9. Claims 35-37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Chi as applied to claim 1 above, and further in view of Sridhar et al. (US 5,799,064), herein referred to as Sridhar.

As per claims 35,36 although the system disclosed by Krishnan shows substantial features of the claimed invention (discussed above), it fails to disclose that the network adapter includes a Peripheral Component Interconnect (PCI) card and/or an Industry Standard Architecture (ISA) card.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Krishnan in view of Chi, as evidenced by Sridhar.

In an analogous art, Sridhar discloses an apparatus interfacing between a communication channel and a processor for data transmission and reception (see Abstract) further showing that the apparatus may be connected to a bus such as an ISA or PCI bus (see column 3, line 63 – column 4, line 2).

Given the teaching of Sridhar, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Krishnan by employing a network adapter including a PCI and/or ISA card, such as disclosed by Chi, in order to connect to the bus of the end-point computer.

Art Unit: 2153

As per claim 37, Krishnan in view of Chi in view of Sridhar further disclose that the network adapter includes an Integrated Services Digital Network (ISDN) adapter (see Sridhar column 4, lines 11-19).

Response to Arguments

10. Applicant's arguments with respect to claims 1-31,33-41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 6:30-4:00 (1st Friday Off).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Philip J Chea
Examiner
Art Unit 2153

PJC 3/21/07



GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100